

WHAT IS CLAIMED IS:

1. A modified oilseed material comprising:
at least about 85 wt.% (dsb) protein; at least about 40 wt.% of the protein has an apparent molecular weight of greater than 300 kDa; and at least about 40 wt.% of the protein in a 50 mg sample of the modified oilseed material is soluble in 1.0 mL water at 25° C.
2. A method for producing a modified oilseed material comprising:
extracting oilseed material with an aqueous solution to form a suspension of particulate matter in an oilseed extract; and
passing the extract through a filtration system including a microporous membrane to produce a permeate and a protein-enriched retentate, wherein the microporous membrane has a filtering surface with a contact angle of no more than 30 degrees to form the modified oilseed material.
3. A food composition comprising a modified oilseed material wherein the modified oilseed material comprises at least 85 wt.% protein on a dry solids basis; at least about 40 wt.% of the protein has an apparent molecular weight of at least 300 kDa; and at least 40 wt.% of the protein in a 50 mg sample of the modified oilseed material is soluble in 1.0 mL water at 25°C.